

REMARKS

Claims 1-20 are pending and stand rejected.

A. The Abstract

The Patent Examiner objected to the Abstract. Applicants respectfully traverse.

Although Applicants are quite familiar with the MPEP requirements for the Abstract, 35 U.S.C. §101 *et seq.* has no requirement for an abstract. Nonetheless, Applicants tender a proposed amended abstract. No new matter has been added.

B. Drawings

The Patent Examiner objected to the drawings as they are labeled Figure 8 and Figure 9 but there are references in the specification to Figures 8a and 8b. The specification has been amended to correctly identify the drawings. This was merely a label change and no new matters has been added by the amendment.

C. Specification

The Patent Examiner objected to the specification because there is no Summary section. Applications respectfully traverse.

Per 35 U.S.C. §112, the patent, and hence its application, “must contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.” 35 U.S.C. §112 ¶ 1. “The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” 35 U.S.C. §112 ¶ 2. Clearly, no statutory basis exists for a summary.

The CFR does not require a summary. 37 CFR 1.73. SUMMARY OF THE INVENTION, recognizes that a summary is not mandatory: “A brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed. (emphasis added)) Note that the C.F.R. recognizes that summaries may be omitted (“when set forth” and “should,” not “must”). Even the MPEP itself does not make a summary mandatory (the language used regarding the Summary is “preferable,” not “shall”): “The following order of arrangement is preferable in framing the specification.” MPEP §601. Innumerable patents have been allowed without summaries.

Accordingly, Applicants respectfully decline to supply a summary.

D. Rejections under 35 U.S.C. §112 ¶ 1

The Patent Examiner rejected claims 1, 12, 13, 14, 16, 17, 18, 19, and 20 under 35 U.S.C. §112, ¶ 1. Applicants respectfully traverse.

As the Federal Circuit noted long ago: “Specifications teach. Claims claim.” *Id.* at 1121 n.14. Even so, an applicant is not required to describe in the specification every conceivable and possible future embodiment of his invention. *SRI Int’l v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). Accordingly, a patent applicant need not include in the specification that which is already known to and available to the public. *Paperless Accounting, Inc. v. Bay Area Rapid Transit System*, 804 F.2d 659 (Fed. Cir. 1986); *In re Howarth*, 654 F.2d 103, 105 (CCPA 1981). The test for sufficiency of support in an application is whether the disclosure of the application relied upon “reasonably conveys to the artisan that

the inventor had possession at that time of the later claimed subject matter.” *Ralston Purina Company v. Far-Mar-Co, Inc.*, 772 F.2d 1570 (Fed. Cir. 1985).

In fact, the specification is not required to teach every detail of the invention or to be a production specification because, in part, there is a statutory mandate of conciseness. 35 U.S.C. § 112, ¶ 1 (“The specification shall contain a written description ... in ... concise, and exact terms”) The Federal Circuit has admonished against including in the specification material that is known in the art. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1534 (Fed. Cir. 1987) (“A patent need not teach, and preferably omits, what is well known in the art.”); *Howarth*, 654 F.2d at 105 (“An inventor need not, however, explain every detail since he is speaking to those skilled in the art.”); *In re Gay*, 309 F.2d 769, 774 (CCPA 1962) (“Not every last detail is to be described, else patent specifications would turn into production specifications, which they were never intended to be.”). Requiring inventors to include every imaginable detail of a structure corresponding to a claimed means, including those widely understood by persons of ordinary skill in the art, would be the antithesis of conciseness and would result in exceedingly lengthy patents. *Atmel Corporation v. Information Storage Devices, Inc.*, 198 F.3d 1374 (Fed. Cir. 2001).

With all due respect, the four and one-half pages of 35 U.S.C. §112 ¶ 1 rejections asserting a lack in the specification of a “full, clear, and concise description” of the Patent Examiner’s recited terms unnecessarily burden this response. Respectfully, almost every one of the objections, as traversed below, is groundless in view of one of ordinary skill in the software arts, especially one of ordinary skill in the database arts. Indeed, paragraph [0023] even states that an audience for the claimed inventions is “those of ordinary skill in the database arts.” Nonetheless, Applicants respectfully traverse each assertion.

The Patent Examiner asserts that “at least one searchable summary table” in Claim 1 is unclear¹ and that “It appears that generation of the summary table is solely based on user preference which is not disclosed in the specification.” (Office Action, at p. 4) Applicants respectfully traverse.

In 2001, a person of ordinary skill in the computer arts, especially in the database arts, would have readily understand that a “table” is a database term. Tables are often associated with databases but may also be standalone. There is nothing in the claim nor the specification that even intimates that generation of the summary table is based on user preference. The specification notes that “database 22 may comprise user manipulatable data, referred to herein as ‘summary’ data, typically in summary table 12a associated with computer 10. As will be appreciated by those of ordinary skill in the computer arts, database 22 may comprise a single database such as database 22 at server 20 or be distributed to include database 12 at computer 10.” (Specification, [0023]). In the embodiment described in the specification, the summary table contains data that a user may manipulate but requires nothing with respect to the user creating the table itself.²

In any event, the claim is clear to one of ordinary skill in these arts: there is a searchable summary table that is (1) accessible by the user computer; (2) related (in a relational database sense) to the authority table and the user taxonomy table; and (3) manageable by a user with adequate access permission to manage the summary table, e.g. the user can create, edit, delete, and/or read the summary data, depending on the user’s access rights. The data are what the user can create, edit, delete, and/or read, not the table.

¹ The Patent Examiner uses the phrase “specification does not contain a full, clear and concise description of the ...” Applicants respectfully shorten this phrase, the use of which is legion in the Office Action, to “unclear.”

² As the Patent Examiner must agree, a person of ordinary skill in the computer arts will also recognize that a database software and/or a database administrator may give a user only read access. The user can still manipulate the data, e.g. read it, but may not change it.

The Patent Examiner asserted that the relationship between the tables in Claim 1 is not clear. Applicants respectfully traverse.

Persons of ordinary skill in these arts will recognize “related” as a term of art. Relational databases are old art. Tables comprise records which comprise columns/fields and rows/records. Tables may be related to other tables through fields. One of ordinary skill in the art would readily and rapidly understand that these tables – summary, authority, and taxonomy – may be related by one or more common fields. Fig. 2 indicates exemplary relations between tables. Additionally, the specification describes one such exemplary relation in [0028]: “In the preferred embodiment, each entry in each authority table 22a, described herein as an ‘authority,’ will have a unique identifier such as a primary key value.” Key values are index values used to set relationships between tables.

The Patent Examiner asserted that the step of allowing the user to summarize at least a portion of the retrieved raw data in Claim 12 lacks a description of generating a summary table. Applicants respectfully traverse.

The actual layout of the columns/fields and rows/records in the table is immaterial and can be implemented in numerous, functionally equivalent ways, e.g. programmatically. Thus, the language of the claim is clear to anyone of ordinary skill in these arts that the user summarizes at least a portion of the retrieved raw data where the summarization is later stored in the summary table. Again, the user does not create the summary table, creating instead some of the data (summary) which are to be stored in the summary table. There is nothing in the claims which requires users to create any table. *See, e.g.*, Fig. 3 and Fig. 8 (creating a taxonomy only means entering data, not creating a table structure).

The Patent Examiner asserts that the phrase “appropriate taxonomy table element” in Claim 12 is unclear. Applicants respectfully traverse.

“Appropriate” means something the user thinks appropriate. The term “taxonomy element” means a “category.” (Specification, [0043]) “User taxonomy table 12a may be part of user portion 300 and contains user defined categorizations as well as relationships between each member of taxonomy table 12a to others in taxonomy table 12a.” (*Id.*) The user may additionally associate the captured summary with one or more elements in taxonomy table 12a. “Optionally, the user may create new elements in user taxonomy table 12a for use with the summary.” (*Id.*, at [0053]) The language of claim 12 is clear to one of ordinary skill in these arts: it means “a category that the user thinks appropriate.”

The Patent Examiner asserts that the terms “associating,” “summarization,” and “appropriate element” are unclear in claim 12. Applicants respectfully traverse.

Claim 12 claims associating the user created summarization with an element of the taxonomy table thought by the user to be appropriate and further associating the summarization with the authority table. These associations may be accomplished by (1) a user via screen forms, (2) database code, (3) other code, or (4) a combination thereof, as was the norm in 2001 in these arts. (*See, e.g.*, Fig. 8) For example, the specification and figures also teach that in embodiments one or more forms may be used to create the required associations. “Associate” means “to create a link between.” These terms and their implementations are old art, have clear meaning, and are readily familiar to those of ordinary skill in these arts.

The Patent Examiner asserts that the step of “parsing the raw data prior to storing the captured raw data in the authority table” in Claim 13 is unclear. Applicants respectfully traverse.

Claim 13 recites “parsing the raw data prior to storing the captured raw data in the authority table.” “Parse” is a term of art in software. There are numerous, equivalent methods by which raw data may be parsed. These numerous, equivalent parsing methods were old art and readily familiar to those of ordinary skill in the art at the time of this filing. For example, [0029] states “parsed according to any of a number of equivalent methods to tokenize or otherwise summarize the text file.” See, e.g., United States Patent 6,804,704, to Bates, et al., which is not cited herein as relevant art but cited only to show the use of the term “parse.”

The Patent Examiner asserts that the step of “generating keywords from the parsed summarization” in Claim 14 is unclear. Applicants respectfully traverse.

A keyword is “a word used as a reference point for finding other words or information.” www.dictionary.com, citing *THE AMERICAN HERITAGE® DICTIONARY OF THE ENGLISH LANGUAGE, FOURTH EDITION*, COPYRIGHT © 2000.³ Claim 14 requires parsing the summarization prior to storing the summarization in the summary table and then, using the parsed summarization, generating keywords. These keywords may be used during a search, e.g. they can be indexed and an indexed search employed. This would have been clear to one of ordinary skill in these arts in 2001.

The Patent Examiner asserts that “receiving a notice of addition of new raw data to the authority table at the user computer” in Claim 16 is unclear. Applicants respectfully traverse.

One use of the methods of the claimed inventions is in a computer network. As would have been readily familiar to those of ordinary skill in these arts, data communication between computers in a network is old art and accomplished in numerous, equivalent ways. The specification and drawings indicate a computer network and state that “By way of example and not limitation, software executing at user computer 10,30,50 (FIG. 1) may receive notice that a

³ All definitions herein were obtained from www.dictionary.com and are circa 2000.

new entry has been added to authority table 22a (FIG. 2).” (Specification at [0063]) As would have been familiar to those of ordinary skill in these arts in 2001, notification to software may have been accomplished in numerous, equivalent ways, e.g. semaphores or TCP/IP packet events or e-mail protocol packets. The details of such notice are not important as they would have been familiar to anyone of ordinary skill in these arts, e.g. use of triggered events or semaphores.

The Patent Examiner states that “receiving keywords associated with the new raw data at the user computer” in claim 16 is unclear. Applicants respectfully traverse.

One use of the methods of the claimed inventions is in a computer network. As would have been readily familiar to those of ordinary skill in these arts, data communication between computers in a network is old art and accomplished in numerous, equivalent ways. The specification and drawings indicate a computer network and state that “By way of example and not limitation, software executing at user computer 10,30,50 (FIG. 1) may receive notice that a new entry has been added to authority table 22a (FIG. 2).” (Specification at [0063]) Additionally, the specification notes:

That software may gather the keywords associated with the new element of authority table 22a (FIG. 2) and then, using the user’s taxonomy table 12a (FIG. 2), gather keywords associated by the user with that user taxonomy table 12a (FIG. 2) such as on an element by element basis. For each element in the taxonomy, the software can determine if those keywords are also present in the new authority’s entry at or above a predetermined, configurable threshold. If so, the software can suggest that the newly entered authority is appropriate for the user with respect to that taxonomy category and additionally allow the user to view the authority and create new summaries.

Therefore, a person of ordinary skill in the art would have known of numerous, equivalent data communications techniques, implementable in software, to receive a data stream.

The Patent Examiner states that “processing the user taxonomy table for keywords associated with one or more predetermined elements of the user taxonomy table for keywords

associated with each of those predetermined elements of the user taxonomy table” in claim 16 is unclear because the method of obtaining keywords from a table is unclear. Applicants respectfully traverse.

A table is a software construct readily understood by programmers. Obtaining data from a table is a software concept readily understood by programmers. To “obtain” means to “acquire,” e.g. it is obvious that a programmer would have understood that using database software would be a perfectly acceptable method of obtaining data from a table.

The Patent Examiner states that “processing the user taxonomy table for keywords associated with one or more predetermined elements of the user taxonomy table for keywords associated with each of those predetermined elements of the user taxonomy table” in claim 16 is unclear because the method of obtaining keywords from a table is unclear. Applicants respectfully traverse.

A table is a software construct readily understood by programmers. Obtaining data from a table is a software concept readily understood by programmers. To “obtain” means to “acquire,” e.g. it is obvious that a programmer would have understood that using database software would be a perfectly acceptable method of obtaining data from a table.

The Patent Examiner states that the phrase “examining the keywords associated with each of the predetermined elements of the user taxonomy table against the keywords received associated with the new raw data” in claim 16 is unclear. Applicants respectfully traverse.

To “examine” means to “study or analyze.” Software, as is old in the art, may be used to analyze (examine) data files. Indeed, the patent to Chakrabarti cited the Patent Examiner uses software to analyze data files, although no representation is made that the reference is applicable.

The claimed step involves comparing two sets of data. This would have been readily understood by anyone of ordinary skill in these arts.

The Patent Examiner states that the phrase “generating a relevance factor for the new raw data based on the examination” in claim 16 is unclear. Applicants respectfully traverse.

A “factor” is “a mathematical component that by multiplication makes up a number or expression.” For example, in [0059], the specification teaches “In an embodiment, the user may also set a threshold value for searches such as at 622 whereby a query containing a plurality of keywords for the search requires an authority or summary to **possess at least that threshold of keyword occurrences to be considered a positive or relevant result**. By way of example and not limitation, a user query may contain four keywords and have a threshold of fifty percent. Any summary or authority, depending on the search requested, that has at least two of the four keywords is then presented to the user as a positive or relevant search result. Others, e.g. with only one keyword, are not presented.” (emphasis added) Although it is improper to import extraneous limitations from the specification into the claims, this is an example of how one of ordinary skill in these arts would understand “relevance factor” and how to generate one. As is clear from the context, after analyzing the two data sets, a mathematical component that reflects relevance of one element in a first data set to another in the second data set, e.g. a percentage of terms present, would have been readily apparent to anyone of ordinary skill in these arts.

The Patent Examiner states that the phrase “suggesting the new raw data to the user as relevant for each of the predetermined elements of the user taxonomy table where the relevance factor is at a predetermined threshold level in each of the predetermined elements of the user taxonomy table” in claim 16 is unclear. Applicants respectfully traverse.

In [0061], the specification teaches “Additionally, when new raw data are added to authority table 22a (FIG. 2) or when new elements are added into user question/FAQ table 12c (FIG. 2), the generated keywords may be used to suggest one or more taxonomy categorizations to the user. By way of example and not limitation, software executing at user computer 10,30,50 (FIG. 1) may receive notice that a new entry has been added to authority table 22a (FIG. 2). That software may gather the keywords associated with the new element of authority table 22a (FIG. 2) and then, using the user’s taxonomy table 12a (FIG. 2), gather keywords associated by the user with that user taxonomy table 12a (FIG. 2) such as on an element by element basis. For each element in the taxonomy, the software can determine if those keywords are also present in the new authority’s entry at or above a predetermined, configurable threshold. If so, the software can suggest that the newly entered authority is appropriate for the user with respect to that taxonomy category and additionally allow the user to view the authority and create new summaries.” (emphasis added) For example, software may “suggest” using forms and/or pop-up visual messages, as would have been readily understood in 2001 by one of ordinary skill in these arts. Microsoft® and others have long used software with pop-up windows, balloons, forms, message boxes, voice announcements, and the like for “suggesting” courses of actions to software users. This is old art and would have been readily apparent to anyone of ordinary skill in these arts.

The Patent Examiner states that “formulating a query at a user workstation” is unclear in claim 17. Applicants respectfully traverse.

“Query” is a term of art. As noted in the specification, embodiments of the claimed inventions use databases. Database systems/language often have query languages. Formulating a query is a term of art meaning to create, craft, type in a query. For example, [0057] and [0058]

describe Fig. 6 which illustrates an entry form and teach that the queries may “contain query may designate certain words as required, such as by using a ‘+’ symbol, and words to be omitted, such as by using a ‘-’ symbol. Additionally, the user may use proximity search designators including ‘within sentence,’ ‘within paragraph,’ and/or ‘within ‘n’ words of ‘phrase’” designators. In advanced searches, a user may further be able to designate additional search conditions for one or more fields present in authority table 12a, e.g. dates, authors, type of authority, and the like.” In fact, most Internet search engines in 2000 used forms to let users formulate queries, e.g. www.altavista.com or www.google.com. This step would have been readily understandable by anyone of ordinary skill in these arts.

The Patent Examiner states that the phrase “analyzing the query for keywords” in claim 17 is unclear. Applicants respectfully traverse.

To “analyze” means to “study or examine.” Software, as is old in the art, may be used to analyze (examine) data files or parse the string and tokenize the string, as discussed above. Indeed, the Chakrabarti reference performs an examination, although Chakrabarti is not relevant as a §102 or §103 reference, as discussed below. This step involves determining what keywords exist in the query. In an embodiment, described in [0063], the specification teaches that a natural language query section may be present. These terms would have been readily understood by anyone of ordinary skill in these arts.

The Patent Examiner states that the phrase “obtaining user filtering input for table (sic, should be “tables”) to be searched” is unclear in claim 17. The Patent Examiner further states that “searching for keywords against the tables using the user filtering input and returning search results to the user” are unclear. As these are related. Applicants respectfully traverse them jointly.

In computer science, to filter means that “a program or routine ... blocks access to data that meet a particular criterion.” Paragraphs [0057] and [0058] describe an embodiment of filtering. The specification teaches that for these embodiments, “the user may elect to designate how the keywords are to be viewed for a search to produce a result. ... In advanced searches, a user may further be able to designate additional search conditions for one or more fields present in authority table 12a, e.g. dates, authors, type of authority, and the like. ... [T]he user may also set a threshold value for searches such as at 622 whereby a query containing a plurality of keywords for the search requires an authority or summary to possess at least that threshold of keyword occurrences to be considered a positive or relevant result.” As is apparent from the scope of the figures, the discussion in the specification, and the general tableau before one of ordinary skill in these arts in 2001, one or more forms, pop-ups, and the like may be used to accept user input. Moreover, it is readily apparent that, in context and as taught in the specification, summaries and/or authorities may be searched based on the keywords and the results would obviously be those summaries and/or authorities that meet the user’s filtering criteria. This was old art in 2001. This step would have been readily understandable by anyone of ordinary skill in these arts.

The Patent Examiner rejected claim 18, stating the phrases “allowing the user to continue the search outside the tables when the number of search results occurs below a predetermined threshold” and “allowing the user to continue the search outside the tables on a user initiated command” are both unclear. Applicants group these together and respectfully traverse.

Claim 1, from which claim 18 depends, defines the following tables: authority table, user definable taxonomy table, and summary table.⁴ These tables provide the antecedent basis to the

⁴ Note: it is the taxonomy that is user definable, not the table, i.e. the data and not the table’s structural layout.

term “the tables.” The specification teaches that users may have access to other sources of authorities. For example, in [0082], the specification teaches “By way of further example and not limitation, the present inventions may be used in conjunction with other free or for-fee services, such as those available through the Internet 100, such as by being a front end to those other services. Acting as an intermediary, the present inventions allow users to contain and refine knowledge and references uncovered during prior searches and integrate new information into the user’s captured knowledge and references. By way of example and not limitation, in this manner a user may continue to use services such as LEXIS/NEXIS™ offered by REID ELSEVIER, INC. or WESTLAW™ offered by THE THOMSON GROUP but not be required to utilize the taxonomies used by those services. Similarly, users may access search engines available through the Internet 100 such as YAHOO™ or GOOGLE™ which either have their own taxonomy or offer no taxonomy, and integrate information uncovered with those search into the user’s captured knowledge and references.” (emphasis added) These steps involve allowing the user access from within the claimed invention’s system, e.g. a form, to other sources/tables, e.g. outside, search engines. This would have been readily understood by anyone of ordinary skill in these arts.

The Patent Examiner rejected Claim 19, stating the phrase “wherein the filtering input comprises at least one of limiting searches to a selected element of the taxonomy, limiting searches to a plurality of selected elements of the taxonomy, limiting searches to all elements of the taxonomy, limiting searches based on fields present for an authority table element, and limiting searches based on fields present for a summary table element” is unclear. Applicants respectfully traverse.

As noted above, in computer science, to filter means that “a program or routine ... blocks access to data that meet a particular criterion.” Paragraphs [0057] and [0058] describe an embodiment of filtering. The specification teaches that for these embodiments, “the user may elect to designate how the keywords are to be viewed for a search to produce a result. ... In advanced searches, a user may further be able to designate additional search conditions for one or more fields present in authority table 12a, e.g. dates, authors, type of authority, and the like. ... [T]he user may also set a threshold value for searches such as at 622 whereby a query containing a plurality of keywords for the search requires an authority or summary to possess at least that threshold of keyword occurrences to be considered a positive or relevant result.” As is apparent from the scope of the figures, the discussion in the specification, and the general tableau before one of ordinary skill in these arts in 2001, one or more forms, pop-ups, and the like may be used to accept user input. Moreover, it is readily apparent that, in context and as taught in the specification, in an embodiment summaries and/or authorities are searched based on the keywords and the results would obviously be those summaries and/or authorities that meet the user’s filtering criteria. This was old art in 2001. This step would have been readily understandable by anyone of ordinary skill in these arts.

The Patent Examiner rejected Claim 20, stating that the phrase “wherein a user viewing a summary table element may be allowed to view the raw data from which that summary was derived, the allowing comprising at least one of selecting a region on a display at the user computer in which the summary is being displayed, selecting a command button on the display, and using one or more keys on a keyboard associated with the user computer” was unclear. Applicants respectfully traverse.

Numerous forms are illustrated in the figures, e.g. Fig. 4 illustrating viewing summary data at 420. Numerous equivalent methods of viewing the authority data from which the summary data were generated were readily understood by those of ordinary skill in these arts in 2001. For example, [0053] teaches “By way of example and not limitation, the user may retrieve the previously entered element from authority table 12a, view the raw data associated with that element, highlight or mark a section of the raw data to be captured, and signal a desire to capture the highlighted or marked section as a summary. This may be accomplished, by way of example and not limitation, by using a mouse to highlight the section and then using a right-button click of the mouse to bring up a menu that has an entry to allow capture.” (emphasis added) The actual method is not limited to buttons, however, as use of buttons is but a single method of allowing a user to elect a view of data.

E. Rejections under 35 U.S.C. §112 ¶ 2

The Patent Examiner rejected claim 15 as being indefinite because it recites “the description of the raw data comprises at least one of the raw data, a pointer to the raw data, a description of a file containing the raw data, and a description of a remote source location of a file containing the raw data.” The scope is asserted as being “difficult to determine” because it is unclear how a description of raw data could comprise the raw data itself. Applicants respectfully traverse.

Consider, for example, raw authority data of the following type: “ $a = b + c$.” That is, this formula by itself is the “authority” and could also be the best description of the formula. Another description could also be “a formula for adding two variables and storing them in a third variable.” This, however, would not be as concise as simply having the actual formula. A user, according to the claims and teachings of the specification, could assign one or more categories to

this authority, e.g. “math formulae” or “algebra.” Thus, a user could browse by category, e.g. algebra, and see this formula as its own description. In any event, raw data can easily be its own best description, e.g. raw data that is a JPEG or GIF may be its own best description (“a picture is worth a thousand words”).

F. Rejections under 35 U.S.C. §102

The Patent Examiner rejected claims 1 and 4-11 under 35 U.S.C. §102(e) in view of Chakrabarti. Applicants respectfully traverse.

“Anticipation under 35 U.S.C. § 102 means lack of novelty, and is a question of fact. To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim.” *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001) (emphasis added).

Chakrabarti discloses a system and method for optimizing I/O to low-level index access during bulk-routing through a taxonomy to classify documents, e.g., Web pages, in the taxonomy. Chakrabarti does not disclose every element and limitation of claim 1 arranged as in Claim 1.

First, Charabarti does not disclose an authority table comprising “raw” data. Instead, Chakrabarti discloses “database 18 can include plural tables 22 that in turn include information related to Web documents (emphasis added).” As used in the present inventions, “authority” is understood to mean any source of information and may comprise at least one of text data, graphics data, audio data, video data, and the like, or combinations thereof. Authority data may comprise documents such as documents, images, and the like. Authority data may further comprise references to the actual data, such as a URL or other file link. In an exemplary legal application, the documents may further comprise case law files, statutes, and court rules. Thus,

“raw” data would include the Web documents themselves and not be restricted to information related to the Web documents. Although the present claimed inventions contemplate having data in its tables which may, indeed, relate to those web documents (descriptions, e.g., as taught in the specification), the authority table(s) comprise the raw documents themselves. Chakrabarti’s tables, therefore, being restricted to information related to but not including the Web documents, do not disclose an authority table.

Second, Chakrabarti does not disclose a summary table. Instead, Chakrabarti discloses that documents (raw data) sought to be classified can be referred to as “test” documents and can be represented in one or more tables. These “representations” are not summaries and they are not user created summaries. In the present claimed inventions, each element (a “summary”) in a user summary table must be linked to at least one element (category) in a user taxonomy table as well as to a single element (authority) in the authority table. Chakrabarti’s “test” documents are not linked to at least one element (category) in a user taxonomy table (as discussed below, there is no taxonomy table as claimed in claim 1 because, in part, the user in the present inventions creates the data content in the user taxonomy table) as well as to a single element (authority) in the authority table (indeed, there is no authority table in Chakrabarti). The summary data are manageable by a user in the claimed inventions. Chakrabarti’s table is not disclosed as being manageable by a user. In fact, Chakrabarti teaches away from users managing the tables, e.g. “computer readable code means can process a group of documents using the means for classifying by testing all documents in the group at a test node in the taxonomy, prior to testing any document at a node other than the test node. Thus, entire taxonomy nodes at a time are processed.”

Third, Chakrabarti does not teach that the user can define the taxonomy table entries (the data) and teaches away from the user managing the taxonomy table, i.e. its data, by teaching that the computer software does the classification of documents. In the present claimed inventions, the user creates the data in the taxonomy table and classifies the authorities and their summaries.

Fourth, Chakrabarti fails to disclose any software that allows a user to manipulate the tables, especially the taxonomy table or the summary table. In fact, Chakrabarti is completely devoid of any mention of users and their ability to manipulate (or even perceive) the tables or the data within those tables. Instead, Chakrabarti teaches away from user involvement by teaching that “supervised learning” can be used, “wherein a few training documents initially are assigned to the various nodes of a taxonomy and subsequent documents are then classified [by his disclosed software] based on comparisons with the training documents.”

Accordingly, Chakrabarti fails to disclose each and every element of Claim 1, arranged as in Claim 1.

With respect to Claim 4, Claim 4 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 4 depends from an otherwise allowable claim, Claim 4 is itself allowable.

With respect to Claim 5, Claim 5 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 5 depends from an otherwise allowable claim, Claim 5 is itself allowable. Moreover, Chakrabarti does not specifically disclose raw data comprising legal data, medical data, educational data, manufacturing data, scientific data, repair data, audiovisual data, and entertainment data. The most that Chakrabarti discloses is Web documents and databases that contain text documents, audio, and video, but these “raw” files are not included in its “plural tables.”

With respect to Claim 6, Claim 6 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 6 depends from an otherwise allowable claim, Claim 6 is itself allowable. Further, as discussed above, Chakrabarti does not disclose an authority table.

With respect to Claim 7, Claim 7 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 7 depends from an otherwise allowable claim, Claim 7 is itself allowable.

With respect to Claim 8, Claim 8 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 8 depends from an otherwise allowable claim, Claim 8 is itself allowable.

With respect to Claim 9, Claim 9 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 9 depends from an otherwise allowable claim, Claim 9 is itself allowable. Moreover, Chakrabarti does not disclose use of Internet browsing software executable at the user computer.

With respect to Claim 10, Claim 10 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 10 depends from an otherwise allowable claim, Claim 10 is itself allowable. Moreover, there is no disclosure of a user being allowed to submit a query to the query software via the Internet. The only query mentioned by Chakrabarti is "The first query at the root node is identical to the query preceding the left outer join shown above. However, rather than completely finish taxonomy traversal before classifying another document, the present invention processes entire taxonomy nodes at a time with plural documents." This query is the result of his software and most definitely not a user submitting a query via the Internet.

With respect to Claim 11, Claim 11 depends from Claim 1 which is distinguishable over Chakrabarti. Because Claim 11 depends from an otherwise allowable claim, Claim 11 is itself

allowable. Moreover, there is simply no disclosure within Chakrabarti of any type of user interface. Chakrabarti does not disclose users interfacing to its system or using its methods, all of which are processed without human intervention.

Accordingly, Chakrabarti does not function as an anticipatory reference under 35 U.S.C. §102(e).

G. Rejections under 35 U.S.C. §103

The Patent Examiner rejected claim 2 under 35 U.S.C. §103(a) over Chakrabarti in view of Price and Claim 3 over Chakrabarti alone. Applicants respectfully traverse.

As a preliminary matter, Applicants respectfully state that they have jointly and commonly owned the inventions claimed herein since at least the application date.

Obviousness is ultimately a conclusion of law based on underlying findings of fact. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). These underlying factual findings include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) the extent of any proffered objective indicia of non-obviousness. *Id.* at 17-18. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52 (Fed. Cir. 2001) (“the central question is whether there is reason to combine [the] references,” a question of fact drawing on the Graham factors). “The factual inquiry whether to combine references must be thorough and searching.” *Id.*; *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000) (“a showing of a suggestion, teaching, or motivation to combine the prior art references is an ‘essential component of an obviousness

holding”)) (quoting *C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998)); *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”); *In re Dance*, 160 F.3d 1339, 1343 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (teachings of references can be combined only if there is some suggestion or incentive to do so.)

With respect to Claim 2, Chakrabarti does not disclose that which is claimed in Claim 1. Chakrabarti discloses a system and method for optimizing I/O to low-level index access during bulk-routing through a taxonomy to classify documents, e.g., Web pages, in the taxonomy. Price discloses a method and apparatus for routing calls in a switched digital network and a processor for use in such a network are provided in which tables of call control information store information for different categories of call control information in separate parts of the table or in separate tables. There is no motivation, suggestion, or teaching that would even hint at combining these references. Chakrabarti is looking to help aid high-dimensional searching in multimedia databases that contain text documents, audio, and video. Price is directed towards avoidance of duplication of information across a call control table as well as portability of tables. Chakrabarti is in the field of document access control. Price is in the field of telephony. Applicants respectfully submit that there is no motivation, suggestion, or teaching of the desirability of making this specific combination suggested by the Patent Examiner.

Even so, combining these two references – and there is no reason, suggestion, or motivation as to why anyone would – would not result in the invention claimed in Claim 2.

Instead, you would end up with:

A system and method for optimizing I/O to low-level index access during bulk-routing through a taxonomy to classify entries in the taxonomy, wherein:

in a first optimization, bulk-routing is regarded as a generalized join operation in a relational database framework;

in a second optimization, instead of processing each document individually through nodes of the taxonomy, a group of documents are processed node by node in a wavefront-style routing scheme for better amortization of index probes;

in response to a request from one of said nodes (10, 20) for a call of a specific type to be made, examining said call control table (300) for call control information for said call type; and

using the call control information stored for said call type to route the call, wherein the call control table is adapted for associating an element of a first category of call control information, which is stored as a single table entry in a first part of the call control table, with multiple table entries for one of the other call control information categories stored in a different part of the call control table, such that said single table entry simultaneously forms part of the stored call control information for a plurality of different call types.

In short, even the combination of these two does not disclose a system for organization of information, comprising (a) a server comprising a searchable authority table or (b) a user computer further comprising at least one user definable, user manipulatable taxonomy table, (c) at least one user manageable searchable summary table that is related to the authority table and the user taxonomy table, and (d) software executable in the user computer to provide access to and manipulation of the taxonomy table and the summary table.

With respect to Claim 3, Chakrabarti, as discussed herein above, does not disclose the limitations of Claim 1. With respect to management of the summarization table that comprises

creating, modifying, and deleting elements of the summary table and associating elements of the summary table with at least one element of the user taxonomy table, such management would be by the user. (See Claim 1(b)(ii)(c)) As discussed above, Chakrabarti does not even suggest user manipulation and teaches away from user manipulation by teaching an automated system.

H. Other Rejections

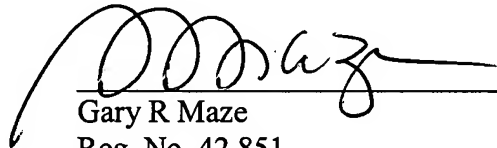
The Patent Examiner rejected claims 2-11 and 15 as depending from a rejected base claim. However, as traversed above, all these claims are either themselves independently allowable or depend from an otherwise allowable claim and are therefore allowable themselves.

CONCLUSION

In view of the foregoing, Applicants respectfully request a Notice Of Allowance for all claims 1-20.

Respectfully submitted,

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Gary R Maze
Reg. No. 42,851
Duane Morris LLP
3200 Southwest Freeway Suite 3150
Houston, TX 77027
Telephone: 713.402.3900
Facsimile: 713.402.3901

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